

**HUNTERS POINT SHIPYARD
RESTORATION ADVISORY BOARD (RAB) - MEETING AGENDA
THURSDAY, 25 JULY 2002**

Day/Date:
THURSDAY – 25 July 2002

Time:
6:00 p.m. to 8:10 p.m.

Location:
**Dago Mary's Restaurant
Hunters Point Shipyard
Building # 916
San Francisco**

Facilitator: **Marsha Pendergrass**

Time	Topic	Leader
6:00 p.m. – 6:10 p.m.	Welcome/Introductions/Agenda Review	Marsha Pendergrass <i>Facilitator</i>
6:10 p.m. – 6:15 p.m.	Approval of Meeting Minutes from 27 June 2002 RAB Meeting <ul style="list-style-type: none"> Action Items 	Marsha Pendergrass
6:15 p.m. – 6:25 p.m.	Navy Announcements	Keith Forman <i>Navy Co-chair</i>
	Community Co-chair Report/Other Announcements	Lynne Brown <i>Community Co-chair</i>
6:25 p.m. – 7:00 p.m.	Historic Radiological Assessment	Vincent DeInnocentiis <i>Navy</i>
7:00 p.m. – 7:10 p.m.	BREAK	
7:10 p.m. – 7:40 p.m.	Landfill Gas Removal Action Update	Keith Forman, Dave DeMars, "Maz" Mazowiecki
7:40 p.m. – 8:00 p.m.	Subcommittee Reports	Subcommittee Leaders
8:00 p.m. – 8:10 p.m.	Future Agenda Topics <ul style="list-style-type: none"> AQMD presentation 	Marsha Pendergrass
8:10 p.m.	Adjournment	Marsha Pendergrass

HPS web site: <http://www.efds.w.navy.mil/Environmental/HuntersPoint.htm>

RAB Navy Contact: Mr. Keith Forman (619) 532-0913 or (415) 515-6216

- - - P U B L I C N O T I C E - - -
H U N T E R S P O I N T S H I P Y A R D
Restoration Advisory Board Meeting

♦ ♦ ♦
6:00 P.M. - 8:00 P.M.

Thursday, July 25, 2002

Dago Mary's Restaurant

Hunters Point Shipyard, Building #916

San Francisco

The Restoration Advisory Board (RAB) is composed of concerned citizens and government representatives involved in the environmental cleanup program at Hunters Point Shipyard. Community participation and input is important and appreciated. The purpose of this meeting is to present the community with the current status and future cleanup schedule for Hunters Point Shipyard and to address the concerns of the entire community. Following is a list of the Key Topics to be discussed at the meeting:

- ♦ Draft Historic Radiological Assessment

The interested public is welcome!

♦ ♦ ♦

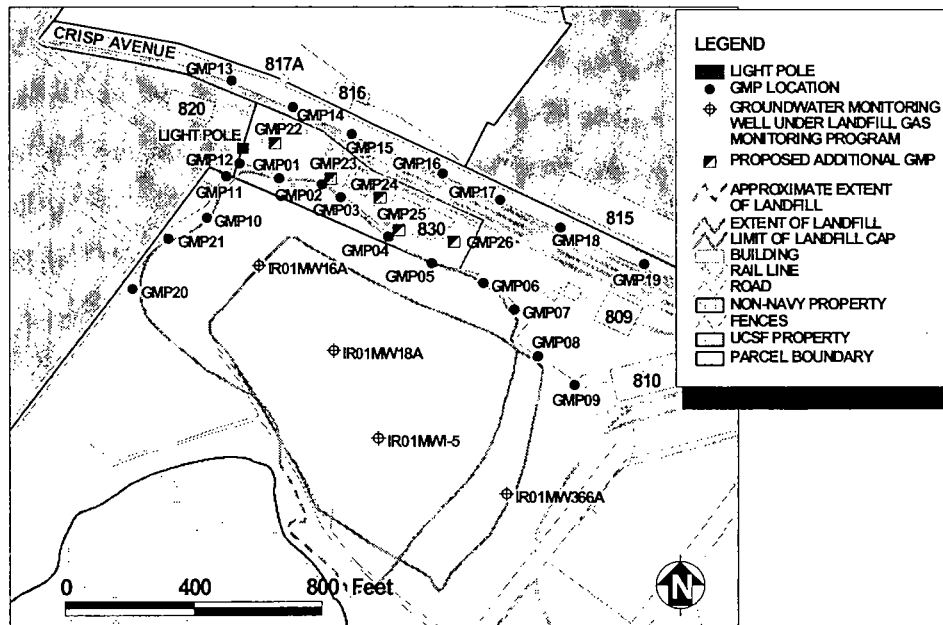
For more information about this meeting and the Installation Restoration Program at Hunters Point Shipyard, please contact:

Mr. Keith Forman, BRAC Environmental Coordinator
Southwest Division Naval Facilities Engineering Command
1230 Columbia Street, Suite 1100, San Diego, CA 92101
(619) 532-0913 or (415) 515-6216

Landfill Gas Removal Action Update

July 25, 2002

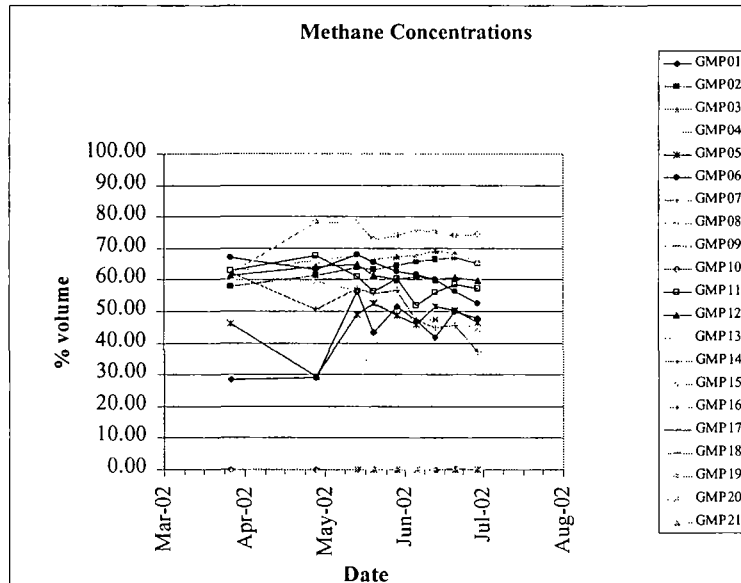
Currently Installed GMPs



GMP MONITORING RESULTS TO DATE: METHANE

ID	LOCATION	METHANE (% BY VOLUME)								
		4/22/02	5/22/02	6/5/02	6/11/02	6/19-20/02	6/26-27/02	7/3&5/02	7/10/02	7/18-19/02
GMP01	North of Cap	28.5	29.2	56.4	43.5	51.7	47.0	41.9	50.1	47.8
GMP02	North of Cap	57.8	61.5	64.0	63.4	64.4	65.7	66.3	67.0	65.2
GMP03	North of Cap	62.7	66	67.7	66.3	67.5	67.6	69.4	68.2	65.7
GMP04	North of Cap	60.2	59.5	56.6	52.9	49.4	47.5	47.6	46.4	44.6
GMP05	North of Cap	46.2	29.3	49.2	52.5	48.6	45.9	51.5	50.2	46.5
GMP06	North of Cap	67.2	63.4	67.9	65.6	62.8	61.6	60.0	56.3	52.6
GMP07	North of Cap	62.3	50.7	57.3	55.6	56.5	47	44.9	45.7	37.5
GMP08	North of Cap	62.1	78.2	78.2	72.8	74.1	76	75.0	74.2	74.4
GMP09	North of Cap	0.1	0.2	0.0	0.0	0.1	0.1	0.1	0	0.3
GMP10	West of Cap	0.1	0	0.1	0.0	0	0	0.0	0.2	0.0
GMP11	West of Cap	63	67.7	61.2	56.2	60.6	51.9	56.0	58.7	57.3
GMP12	North of Cap	61.5	64.3	64.8	61.4	60.2	61.1	60.0	60.8	59.9
GMP13	Crisp Ave	NA	NA	0.0	0.0	0	0	0	0	0
GMP14	Crisp Ave	NA	NA	0.0	0.0	0	0	0	0	0
GMP15	Crisp Ave	NA	NA	0.0	0.0	0	0	0	0	0
GMP16	Crisp Ave	NA	NA	0.0	0.0	0	0	0	0	0
GMP17	Crisp Ave	NA	NA	0.0	0.0	0	0	0	0	0
GMP18	Crisp Ave	NA	NA	0.0	0.0	0	0	0	0	0
GMP19	Crisp Ave	NA	NA	0.0	0.0	0	0	0	0	0
GMP20	West of Cap	NA	NA	NA	0.4	0	0	0	0	0
GMP21	West of Cap	NA	NA	NA	0.3	0	0	0	0	0
IR01MW1-5	MW on cap	64.6	NR	NR	NR	65.1	70.2	72.4	70.0	70.7
IR01MW18A	MW on cap	42.3	NR	NR	NR	53.0	54.9	55.3	56.9	56.6
IR01MW16A	MW on cap	53.3	60	NR	NR	4.2	0	23.4	49.0	40.8
IR01MW366A	MW on cap	15.6	14.3	15.1	NR	16.6	5.1	1.2	15.3	7.2
Bldg 830 CS	Ambient Air	NR	NR	0	0	0	0	NR	0	0
Light Pole	Ambient Air	NR	NR	0	0	0	0	NR	0	0
Location A	Ambient Air	NR	NR	0	0	0	0	NR	0	0
Location B	Ambient Air	NR	NR	0	0	0	0	NR	0	0
Location C	Ambient Air	NR	NR	0	0	0	0	NR	0	0

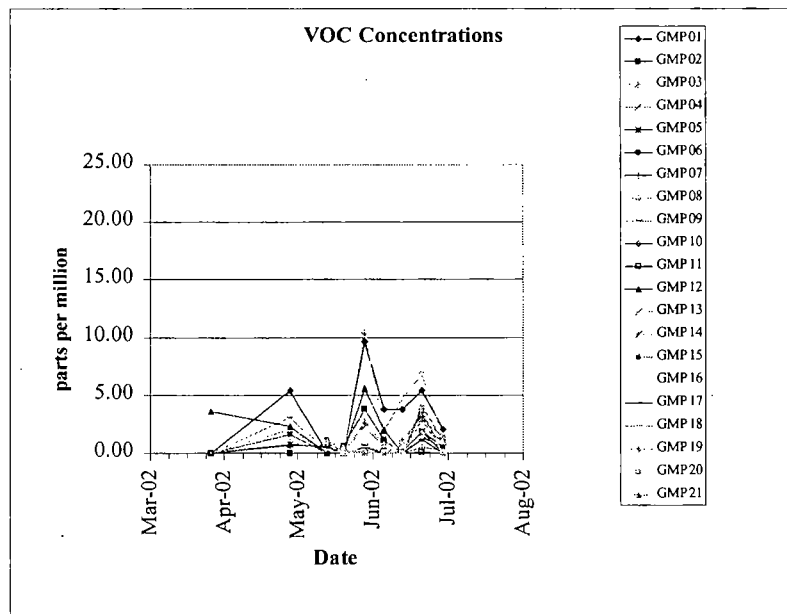
Notes: NR= Not recorded. NA= Not applicable (not yet installed). CS=Crawlspace. ID=Identification.



GMP MONITORING RESULTS TO DATE: VOCs

ID	LOCATION	VOLATILE ORGANIC COMPOUNDS (parts per million)								
		4/22/02	5/22/02	6/5/02	6/11/02	6/19-20/02	6/26-27/02	7/3&5/02	7/10/02	7/18-19/02
GMP01	North of Cap	NA	5.4	0.0	0.0	9.6	3.8	3.8	5.4	2.1
GMP02	North of Cap	NA	1.6	0.0	0.6	3.8	1.1	0	3.6	0
GMP03	North of Cap	0	1	0.0	0.0	2.7	0.8	1.1	3.3	0.5
GMP04	North of Cap	0	0.3	0.0	0.0	2.3	0.5	0.7	3.3	0.6
GMP05	North of Cap	0	0.8	0.5	0.0	0.5	0	0	1.9	0.5
GMP06	North of Cap	0	0	0.0	0.0	0	0	0	1.2	0
GMP07	North of Cap	0	0	0.0	0.0	0	0	0	0.5	0.3
GMP08	North of Cap	0	2.1	0.0	0.0	10.4	2.0	4.7	6.8	1.4
GMP09	North of Cap	0	3.1	0.2	0.0	0	0	0	4.0	1.1
GMP10	West of Cap	0	0.65	0.6	0.0	0	0	0.2	1.9	0
GMP11	West of Cap	0	0	0.0	0.0	0	0.2	0	0.1	0
GMP12	North of Cap	3.6	2.3	0.0	0.0	5.6	2	0	1.5	0.4
GMP13	Crisp Ave	NA	NA	1.2	1.5	0.6	0.2	0	2.9	0
GMP14	Crisp Ave	NA	NA	1.0	0.5	0.2	0	0	2.9	1.5
GMP15	Crisp Ave	NA	NA	1.1	0.3	0.1	0	0.7	3.6	0
GMP16	Crisp Ave	NA	NA	0.9	0.5	0.1	0	0.9	2.9	0
GMP17	Crisp Ave	NA	NA	0.9	0.2	0.2	0	0.9	2.9	0
GMP18	Crisp Ave	NA	NA	0.3	0.1	0.1	0	0.9	2.9	0.1
GMP19	Crisp Ave	NA	NA	1.1	0.3	0.2	0	0.9	2.9	0
GMP20	West of Cap	NA	NA	NA	0.0	0	0	0	1.5	0.1
GMP21	West of Cap	NA	NA	NA	0.3	0	0	0	1.9	1.1
IR01MW1-5	MW on cap	0	NR	NR	NR	0	0	0	0.5	0.7
IR01MW18A	MW on cap	0	NR	NR	NR	0	0	0	0.8	1.3
IR01MW16A	MW on cap	0	0	NR	NR	0	0.2	0	0.8	0
IR01MW366A	MW on cap	0	0	0	NR	0	0	0	0.8	0
Bldg 830 CS	Ambient Air	NA	NA	0.0	0	0	0	NR	1.9	0
Light Pole	Ambient Air	NA	NA	0	0	0	0	NR	7.1	1.0
Location A	Ambient Air	NA	NA	NA	0	0	0	NR	2.6	0
Location B	Ambient Air	NA	NA	0.2	0	0	0	NR	3.3	0
Location C	Ambient Air	NA	NA	0.0	0	0.5	0	NR	2.6	0

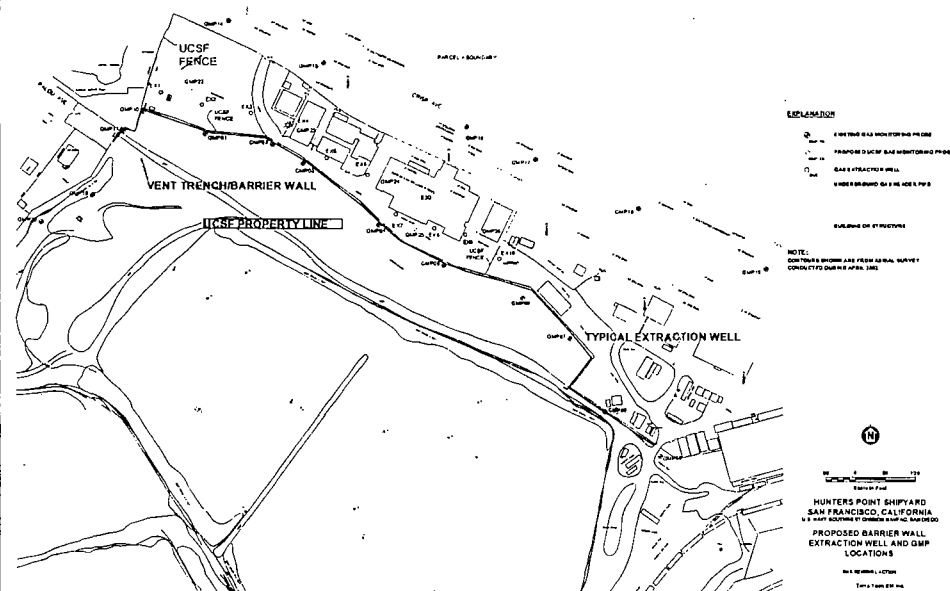
Notes: NR= Not recorded. NA= Not applicable (not yet installed). CS=Crawlspace. ID=Identification.



Emergency Removal Action

- 5 additional GMPs will be installed on the UCSF property
- 10 active extraction wells will be installed within UCSF compound
- 14 passive vents will be installed along the northern site boundary (14) within a trench/barrier system
- Gas from vents and wells will run through a portable treatment unit (GAC and PZ filters) before emitting to atmosphere

Conceptual Landfill Gas Extraction System Layout



Extraction Technologies Evaluated For UCSF Compound

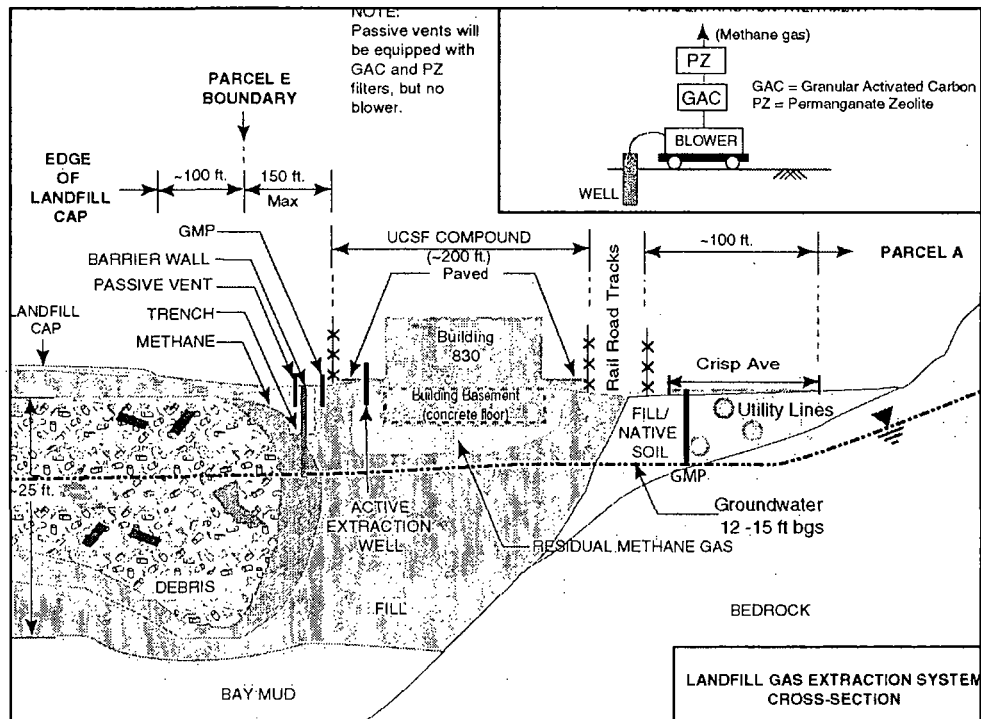
Extraction Technologies Evaluated	Rapid Installation	Rapid Cleanup	Installation Cost	Operating Cost	Noise	Comments
Barrier Trench (Navy) w/ Passive Venting (UCSF)	YES	NO	MED	LOW	LOW	Effectively cuts off source. Does not provide treatment. Passive venting on UCSF property would be slow.
Passive Venting Wells	YES	NO	LOW	LOW	LOW	Does not cut off source. Does not provide treatment. Passive venting on UCSF property may be slow or ineffective.
Horizontal Extraction Wells	YES	YES	HIGH	MED	MED	Less disruptive to UCSF operations if installed from landfill side. Concern about viability of installing horizontal wells due to serpentine under UCSF.
Barrier wall (Navy)/Extraction Wells (UCSF)	YES	YES	MED	MED	MED	Does cut off source. Provides gas treatment. Active extraction on UCSF property should be effective and timely.

Treatment Technologies Evaluated

Technologies Evaluated	BACT for Landfill Gas	Rapid Installation	Rapid Cleanup	Effective Treatment	Installation Cost	Operating Cost	Noise	Comments
Granular Activated Carbon and Plastic Resin Filters	NO	YES	YES	YES	LOW	MED	MED	Removes VOCs that these are already at very low concentrations in soil-gas. Methane vents to atmosphere. No combustion byproducts.
Thermal Oxidizer	NO	NO	YES	YES	MED	HIGH	MED	99.99%+ Destruction efficiency on most compounds. Cannot handle concentrated methane streams due to potential over-heating.
Internal Combustion Engine	YES	NO	YES	YES	MED	MED	HIGH	Requires a good quality gas stream. The quantity and quality of methane at HPS is expected to be low.
Open Flare	YES	YES	YES	YES	MED	MED	MED	Similar to enclosed flare.
Enclosed Flare	YES	YES	YES	YES	MED	HIGH	MED	99.99% Destruction efficiency on most compounds. Can handle concentrated methane streams.

Proposed Gas Control/Removal System

- Selected a combination of active extraction and passive venting with NMOC filtering.
- Barrier wall with venting prevents any future migration of methane to the north into UCSF compound.
- Active extraction on UCSF compound to rapidly reduce concentrations under the compound.
- Actively extracting UCSF compound should remove gas from under the compound in less than 6 months.

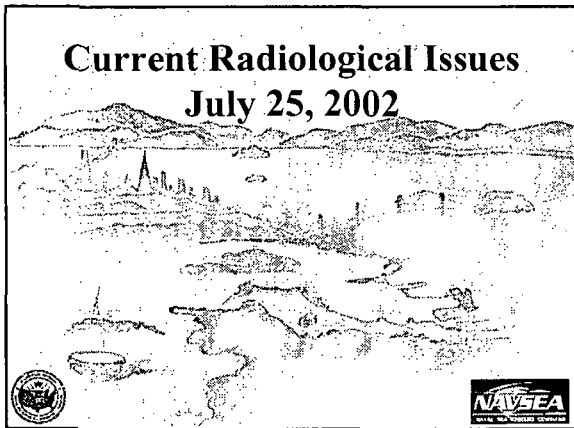


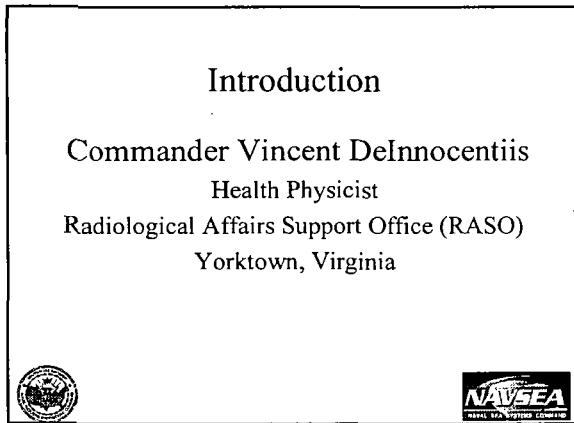
Emergency Removal Action - Schedule

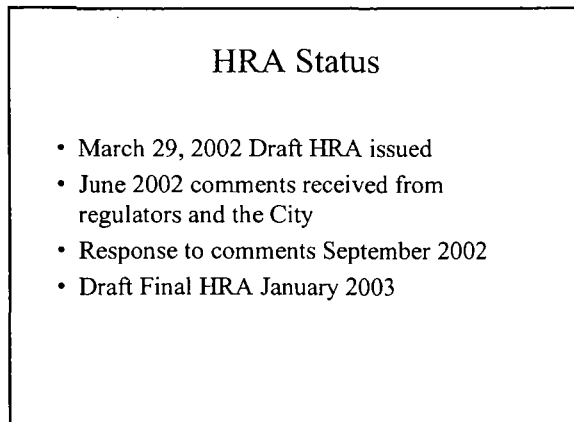
- Treatment system construction to begin in mid August 2002
- System anticipated to begin running in late August 2002
- Goal of less than 5 percent methane within the UCSF compound anticipated within 6 months

Emergency Removal Action – Exit Strategy

- Remove methane to below 5% within UCSF compound GMPs and in landfill GMPs at UCSF fence line.
- If methane levels remain below 5%, end emergency response and continue periodic monitoring of probes.



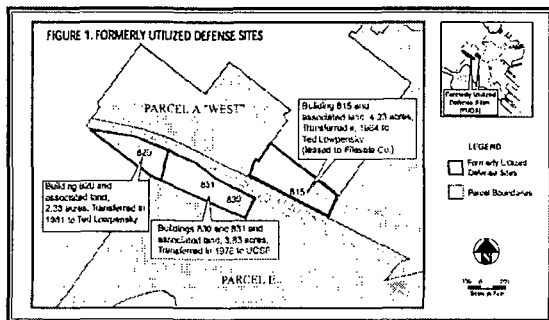




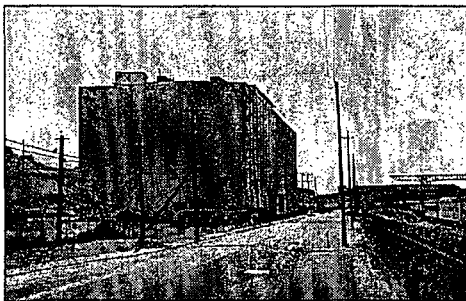
Formerly Utilized Defense Sites (FUDS)

- FUDS – Formerly utilized defense sites, no longer owned by the Navy
- FUDS program administered by the Army Corps of Engineers
 - Buildings 815, 820, 830, and 831

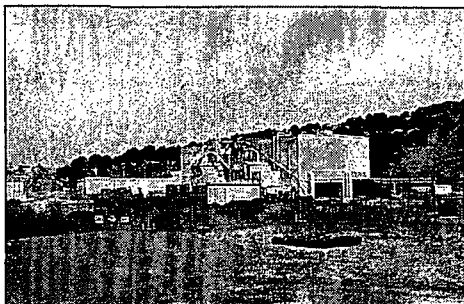
Formerly Utilized Defense Sites



Formerly Utilized Defense Sites (FUDS) Building 815



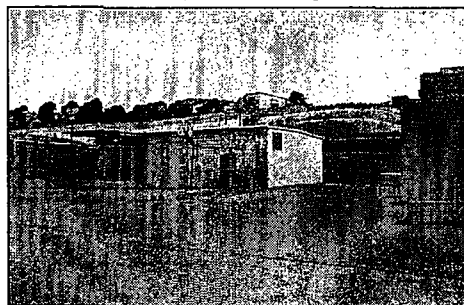
Formerly Utilized Defense Sites
(FUDS) Building 820



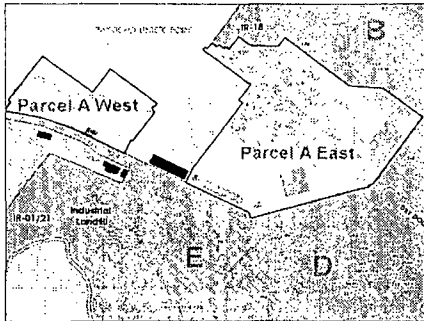
Formerly Utilized Defense Sites
(FUDS) Building 830



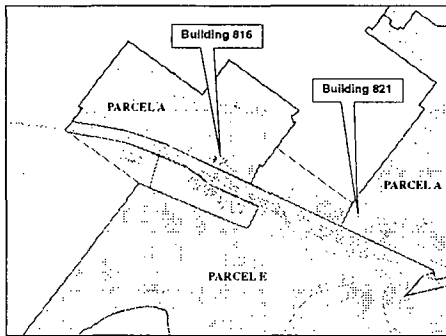
Formerly Utilized Defense Sites
(FUDS) Building 831



Parcel A Overview



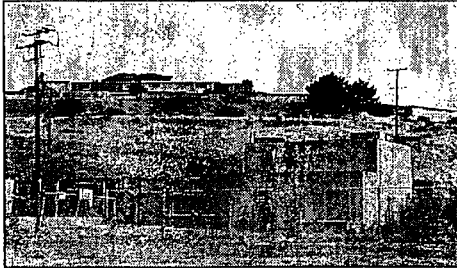
Buildings 816 and 821



Parcel A Building 816

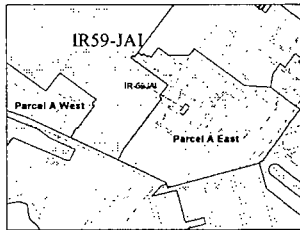


Parcel A Building 821



Sandblast Grit at Parcel A IR Site 59-JAI (Jerrold Avenue Investigation)

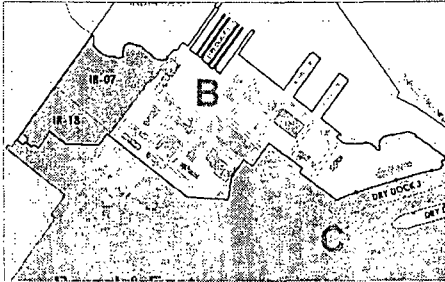
- Completely delineated, characterized and removed during the RI
- Off-site disposal required due primarily to pesticides and metals
- Field screened for radiation and no elevated levels were found



Ongoing Radiological Actions

- Parcel B
- Parcel C
- Parcel D
- Parcel E

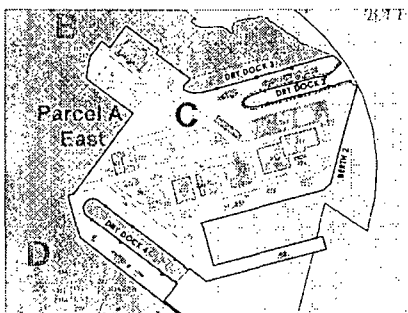
Parcel B Overview



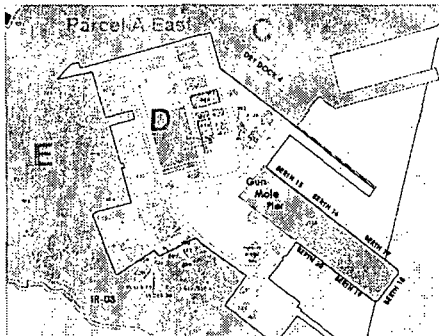
Sites 7 and 18

- **1992 (Phase I)** Identified several soil areas in Sites 7 and 18 with elevated gamma readings
- **1993 (Phase II)** Navy investigated by trenching the elevated areas. No devices were found.
- **1994** EPA went out and took samples of Sites 7 and 18
- **1995** California Department of Public Health gave clearance for *no further action* on Sites 7 and 18

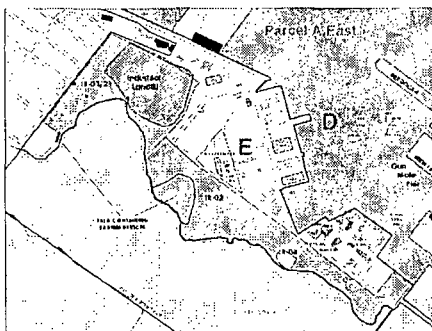
Parcel C Overview



Parcel D Overview



Parcel E Overview



Basewide Groundwater Study

- Phase III Groundwater Data Gaps Investigation currently underway
- Samples analyzed to identify potential radionuclides in groundwater
- 1st sampling round data available in September 2002
- 2nd sampling round scheduled for September 2002

Conclusion

- No further Navy action on FUDS
- No further radiological issues on Parcel A
- Parcel B surveys have been completed and data review is underway
- Ongoing remedial actions on Parcels C, D, and E
- Phase III Groundwater Data Gaps Investigation Ongoing

Questions and Answers

Extraction Technologies Evaluated For UCSF Compound

Extraction Technologies Evaluated	Rapid Installation	Rapid Cleanup	Installation Cost	Operating Cost	Noise	Comments
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preferred alternative as of 7/17/2002

Treatment Technologies Evaluated

Technologies Evaluated	BACT for Landfill Gas	Rapid Installation	Rapid Cleanup	Effective Treatment	Installation Cost	Operating Cost	Noise	Comments
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Internal Combustion Engine	YES	NO	yes	YES	MED	MED	HIGH	Requires a good quality gas stream. The quantity and quality of methane at HPS is expected to be low.
Open Flare	YES	YES	YES	YES	MED	MED	MED	Similar to enclosed flare
Enclosed Flare	YES	YES	YES	YES	MED	HIGH	MED	99.99% Destruction efficiency on most compounds. Can handle concentrated methane streams.

* preferred alternative as of 7/17/2002

Questions from 27 June 02 Landfill Gas Update Presentation

1. J.R. Manuel, RAB member

- A. How did the migration of the gas be determined, and how was the direction it came from get proven?

Answer: Methane gas generated from the landfill was determined to be migrating north of the landfill during the Soil-Gas Investigation conducted in March 2002. During the investigation soil-gas locations were first drilled around two-thirds of the perimeter of the cap. "Step-outs" were then taken outward from the cap until no methane gas was detected. Methane detections were found only north of the cap.

2. Lani Asher, RAB member

- A. If you don't know what's in the methane, is it safe to burn it off?
B. What happens to VOCs when they are burned? What do they turn in to?

Answer: An incinerator will not be used in the Navy's treatment of landfill gas.

3. Lani Asher, RAB member

- A. Before the active extraction system goes into place – will the public and state regulators have a chance to decide if we think it's safe? Where has it been used safely in the past?

Answer: Yes, the regulators and the RAB community has been presented with the extraction system design. However, the Navy has decided on a new approach in collaboration with EPA and the City of San Francisco.

4. Lani Asher, RAB member

- A. Is the gas extraction system an Emergency Removal Action?
B. What about public input into this decision; and other state agencies?

Answers:

A. Yes, the gas extraction system will be implemented as part of an Emergency Removal Action to reduce the levels on methane gas in the UCSF compound to below 5 percent by volume in air.

B. The public will be notified of the Emergency Removal Action and be updated with the progress of the removal action. City and State agencies have been presented with the design of the extraction system.

5. Theresa Coleman, resident

- A. Urgentness to educate the whole community – how will we improve the outreach process?
- B. At what point, will you re-visit the inclusion of all property owners and city departments heads to help develop a comprehensive emerg. response system?
- C. Public housing residents require a large amount of lay education to prevent children from going on the property. Can we design a process which includes education for us?
- D. Air testing in area and soil

Answers:

- A. *The Navy is attempting to greatly improve their community outreach and increase public participation at the meetings we currently hold. The Navy invites any specific guidance you can give us to improve the program.*
- B. *I do not understand what is meant by the development of a comprehensive emergency response system. Please talk to me after the RAB meeting and clarify what you mean. The Navy does have a Caretaker Site Office that is responsible for the day-to-day emergency response on the base.*
- C. *We are currently working to do just that. In the near future, Navy representatives will be giving presentations to the local community.*
- D. *Ambient air monitoring is currently being conducted at the landfill area. In addition, air samples are collected quarterly at the GMPs and in the UCSF compound under the Landfill Gas Monitoring Program.*

6. Georgia Oliva, resident

- A. Will the “treatment system” be employing any kind of FLAME in its process? If so, this would result in changing the properties of the gas in a most detrimental fashion. Please comment.

Answer: An incinerator will not be used in the Navy’s treatment of landfill gas. Granular activated carbon and permanganate zeolite filters will be used to remove contaminants in the landfill gas.

7. Unidentified

- A. How much methane is in the landfill?
- B. Is the methane system coming from the \$50.9 million?

Answers:

- A. *The volume of methane in the landfill cannot be practically determined. A landfill will continually generate methane if landfill materials are decomposing. However, the level of methane in and around the landfill area is known fairly well from the soil-gas investigation and weekly monitoring of the GMPs.*
- B. *Yes.*

8. Unidentified

- A. Given plans for active extraction, how will cap boundaries be addressed to stop future lateral migration?
- B. Conceptually speaking, how long will the active extraction process take?
- C. How will the Navy deal with the future generation of methane and VOCs after the base is turned over?

Answers:

- A. Future lateral migration of landfill gas will be eliminated by actively extracting the gas. The cap boundary will not need to be modified to address lateral migration of gas.*
- B. The active extraction system will operate until methane levels in the UCSF compound decrease to below 5 percent by volume in air. The process may take 3 to 6 months.*
- C. A barrier wall will be installed between the UCSF compound and the landfill to prevent future migration of landfill gas.*

9. Unidentified

- A. Thermally treating the gas to destroy it will create dioxins in the air (and possibly in the bay). Since we received a report a couple of meeting ago that there is an elevated amount of PAHs on Parcel B – how will creating more be the “BACT” from a public health perspective?

Answer: The landfill gas extracted will not be thermally treated.

10. Unidentified

- A. With the gas extracting what is going to happen to the gas?

Answer: The gas that is extracted will be filtered through GAC and permanganate zeolite units to remove chemicals of concern. The GAC units will absorb most VOCs but not vinyl chloride. The permanganate zeolite unit will remove vinyl chloride and other smaller chained molecules not captured by the GAC unit. Finally, the gas exiting the treatment system will vent to the atmosphere.

11. Unidentified

- A. Did you take a look out some part way. As way for the land(fill)gas to move?
- B. Are these gases burning out inside or out? How much air is the testing you have done?

Answer:

- A. Yes, we did a comprehensive at the utility corridors and the preferential pathways that could have led to landfill gas migration.*

- B. *The landfill gas extracted will not be burned. Ambient air monitoring in the landfill area began in February 2002 and is currently being done weekly at the UCSF compound. Air samples were collected and sent to the lab during the soil-gas investigation. Air samples are currently being collected on a quarterly basis at the GMPs.*

**Hunters Point Shipyard
Monthly Progress Report
June 2002**

This monthly progress report (MPR) summarizes environmental restoration activities conducted by the Navy at Hunters Point Shipyard (HPS) during June 2002. This MPR is prepared in accordance with the HPS Federal Facility Agreement, Section 6.6. The MPR is presented in three sections: Section 1, Parcel Updates, summarizes key activities at each parcel completed during the past month and planned for the upcoming 2 months; Section 2, Schedule, identifies submittals, meetings, and field activities completed during the past month and planned for the upcoming 2 months; Section 3, Other, is intended for special announcements, changes in personnel, basewide issues, or other topics not included in Sections 1 or 2.

1.0 PARCEL UPDATES

Parcel B June 2002 Activities

- Submitted the responses to comments on the final manganese technical memorandum.
- Additional evaluation at Excavation 7-4, and finished disposal of stockpiled soils.
- Continued waste consolidation work.
- Continued soil vapor extraction (SVE) system operation/rebound test and further evaluation of SVE performance data for the Phase II SVE treatability study at Building 123.
- Prepared and submitted the draft January-March 2002 quarterly groundwater monitoring report.
- Conducted April-June 2002 quarterly groundwater monitoring event.

Parcel B July 2002 - August 2002 Activities

- Initiate dispute resolution with senior BCT managers regarding manganese issues.
- Prepare technical memorandum documenting the extent of the debris and other physical conditions at Installation Restoration Site 7.
- Prepare construction summary report for soil remedial action.
- Complete waste consolidation work.
- Continue system operation/rebound test and evaluation of performance data for the Phase II SVE treatability study at Building 123.
- Prepare and submit sampling and analysis plan (SAP) for total petroleum hydrocarbon (TPH) corrective action plan (CAP) groundwater sampling (to address monitored natural attenuation issues related to TPH CAP implementation), and conduct associated field activities.
- Prepare and submit the responses to comments for the groundwater evaluation technical memorandum.
- Prepare and submit the final land use controls implementation plan (LUCIP) pending approval of responses to comments on draft final LUCIP.
- Continue field activities associated with TPH CAP.

Parcel C June 2002 Activities

- Evaluated SVE performance data for the Phase II SVE treatability study at volatile organic contaminant (VOC) areas (study also includes portions of Parcels B and E).
- Continued radiation screening surveys for the historic radiological assessment (HRA).
- Continued well installation activities and tidal study, and initiated groundwater sampling activities associated with Phase III groundwater data gaps investigation (GDGI).
- Continued preparation of final Parcel C time-critical removal action (TCRA) closeout report, including responses to comments on the draft TCRA report.
- Continued preparation of the draft Parcel C revised feasibility study (FS).
- Prepared the draft zero valent iron treatability study work plan and SAP (for Building 272).
- Submitted bench-scale treatability study results for Fenton's reagent chemical oxidation (to resolve agency comments on chemical oxidation treatability study work plan addendum).

- Initiated waste consolidation work

Parcel C July 2002 - August 2002 Activities

- Continue evaluation of performance data for Phase II SVE treatability study at VOC areas.
- Complete and submit the draft zero valent iron treatability study work plan and SAP (for Building 272).
- Continue field sampling activities associated with TPH CAP.
- Finalize and submit draft closeout report for Dry Dock 4 removal action.
- Complete and submit the final Parcel C TCRA closeout report.
- Prepare the draft enhanced bioremediation treatability study work plan (for Building 134).
- Continue field work associated with the Phase III GDGI.
- Continue radiation screening surveys for the HRA.
- Continue preparation of the draft Parcel C revised FS.
- Continue waste consolidation work.

Parcel D June 2002 Activities

- Continued radiation removal action activities near Building 364.
- Conducted tidal study and groundwater sampling associated with Phase III GDGI (limited field work at Parcel D).
- Continued waste consolidation work.

Parcel D July 2002 - August 2002 Activities

- Continue radiation removal action activities at Building 364.
- Continue field sampling activities associated with TPH CAP.
- Prepare responses to comments to draft Parcel D revised FS, and prepare the draft final Parcel D revised FS.
- Continue waste consolidation work.

Parcel E June 2002 Activities

- Continued field work for non-standard data gaps investigation.
- Prepared landfill gas technical memorandum associated with non-standard data gaps investigation.
- Evaluated SVE performance data for Phase II SVE treatability study at Building 406 (limited field activities in Parcel E).
- Continued preparation of the revised draft final standard data gaps SAP.
- Continued radiation screening surveys for the HRA.
- Continued operation of groundwater extraction system at industrial landfill.
- Initiated well installation activities, tidal study, and groundwater sampling activities associated with Phase III GDGI.

Parcel E July 2002 - August 2002 Activities

- Continue field work associated with the non-standard data gaps investigation.
- Complete and submit the landfill gas technical memorandum.
- Initiate emergency removal action for landfill gas.
- Prepare and submit of the revised draft final standard data gaps investigation SAP.
- Initiate field work for the standard data gaps investigation.
- Continue evaluation of performance data for Phase II SVE treatability study at Building 406.
- Continue radiation removal action activities.
- Continue field sampling activities associated with TPH CAP.
- Continue radiation screening surveys for the HRA.
- Continue field work associated with the Phase III GDGI.

- Continued operation of groundwater extraction system at industrial landfill.
- Prepare work plan for phytoremediation at industrial landfill.
- Initiate waste consolidation work.

Parcel F June 2002 Activities

- No activity during this period.

Parcel F July 2002 - August 2002 Activities

- Begin preparation of draft final validation study report (pending receipt/resolution of agency comments on draft report).

2.0 SCHEDULE

This section presents meetings, deliverables, and field activities conducted and planned during this reporting period.

Activities Conducted	Date
Submitted chemical oxidation bench-scale test report	June 6, 2002
BCT monthly meeting	June 11, 2002
Parcel C FS Storyboard Meeting	June 25, 2002
RAB Meeting	June 27, 2002
Submitted Parcel B January-March 2002 quarterly groundwater monitoring report	June 29, 2002

Activities Planned	Date
Submit landfill gas technical memorandum	July 2, 2002
Submit final Parcel C TCRA closeout report	July 12, 2002
Submit sampling and analysis plan for TPH CAP groundwater sampling	July 12, 2002
BCT monthly meeting	July 16, 2002
Submit the final Parcel A finding of suitability to transfer, Revision 2 *	July 23, 2002
RAB Meeting	July 25, 2002
Submit draft Dry Dock 4 removal action closeout report	July 2002
Submit draft zero valent iron treatability study work plan and SAP	July 2002
BCT monthly meeting	August 13, 2002
RAB Meeting	August 22, 2002
Submit the revised draft final Parcel E standard data gaps SAP	August 22, 2002
Submit the draft final Parcel D revised feasibility study*	TBD
Submit the final Parcel B groundwater evaluation technical memorandum*	TBD
Submit the draft final Parcel B revised RAMP*	TBD
Submit final Parcel B LUCIP*	TBD
Resume groundwater treatability study activities at Parcel C VOC areas*	TBD

Note:

- * Document submittal pending receipt and/or resolution of BCT comments

3.0 OTHER

- The Navy is responding to comments and is finalizing Revision 2 of the Parcel A finding of suitability to transfer (FOST). Submittal of the final FOST, Revision 2, is currently scheduled for July 23, 2002.
- The Navy conducted a site walk at the Parcel E industrial landfill on June 22, 2002 that was open to community members.

8/21/02 - next
mtg at 6pm - Michael W.
Waden Library.

Minutes

Hunters Point RAB Technical Review Committee

July 17, 2002

The Hunters Point RAB Technical Review Committee met 6 pm – 8 pm on July 17, 2002, at the Waden Library. Participants were: Lynne Brown, Kevyn Lutton, Christine Shirley, Mike Thomas, Maurice Campbell, Lani Asher, Georgia Oliva, and Jessie Mason. Navy representatives included Keith Forman, David DeMars, Charles Mazzowiecki, and Kim Huynh. Christine Shirley chaired the meeting.

Committee chair Christine Shirley invited the Navy to make a presentation to the committee on the Navy's proposed landfill gas collection and treatment system. In preparation, several members of the Technical Review Committee met in advance to prepare questions for the Navy. The questions were transmitted to the Navy on July 15, 2002. As it turned out the Navy's gas treatment strategy changed dramatically between July 15 and 17, so that many of the original questions were rendered mute.

The committee meeting focused, therefore, on the Navy sharing new information about the proposed collection and treatment system.

Navy presentation

At the June RAB meeting the Navy announced that they were considering an enclosed flare technology to treat collected landfill gas. However, by the time the Technical Review Committee met the Navy had changed their strategy. Their change of strategy was caused by community and regulator concerns. The Navy was now considering a non-thermal filtering method to clean the landfill gas before venting to the atmosphere. The Navy explained that the filtering method would avoid the potential creation of dioxin, but that it would allow methane gas to be vented to the atmosphere. The Navy was considering carbon and permanganate

The Navy also presented changes to the proposed gas collection system. Instead of implementing an active gas collection system the Navy proposed a passive system and barrier at the Navy/UCSF fenceline. Installation of the barrier would involve digging a 1500-foot trench along the fence into which a heavy plastic barrier and permeable piping would be installed. In this way landfill gases would be stopped from migrating from the landfill into the UCSF compound. Inside the UCSF compound the Navy proposed an active collection system. The active system would operate only for a few months until gases trapped under the pavement inside the compound were extracted. Preliminary plans called for filters to be placed on both the passive and active vents.

After explaining their new preferred alternative the Navy went through a matrix of possible alternatives that had been considered. The reasons for rejecting the other alternatives were discussed (attached).

In response to the Navy's presentation, the Technical Review Committee decided to reconsider the questions originally presented. It was anticipated that the Navy would

respond to the new questions in time for the July RAB meeting. It was recognized, however, that time restrictions may make complete responses impossible.

The meeting adjourned at 8 pm, because the library closed.

The Technical Review Committee reconvened the following day (without the Navy) to prepare a new list of questions. These were sent to the Navy via email on July 22, 2002 and are attached to these minutes.

Questions from the HPS RAB Technical Review Committee to the Navy re: the Barrier Trench/gas filtering proposal for landfill gas treatment

1. Please provide more detail about the trenching. When will you start? How long will it take? How much soil will be moved? How many trucks will be required? How will trucks be cleaned before leaving the shipyard?
2. Will there be soil stockpiles? Where will they be located?
3. What will the truck route be? Will you use the back gate to move trucks in and out?
4. What chemicals, VOC's, metals, etc may be drawn into your proposed extraction and treatment system?
5. What sort of emissions does the Navy expect from the collection and treatment system? What emissions have been measured from similar systems?
6. Are you anticipating fugitive emissions? How will you monitor for them?
7. Will there be continuous air monitoring for toxic air contaminants (which may leak from the collection system or blow through the carbon filters)?
8. Specifically, what type of filters will be used? Is this particular type of treatment system installed in any location? If so where? Please show us locations and emission data from similar systems and explain how the inputs might be the same or different from these other systems.
9. Will filters be used on the UCSF and the Navy sides of the fence? Explain how filtering might work with a passive collection system.
10. How much methane will be vented? How does this compare to other sources of methane?
11. Do you anticipate problems due to PCB's and Chlordane when they are drawn into your proposed filters?
12. Will any ground water be extracted with the methane? How will you control that? What will you do with it if it is sucked into the system? Do you need any special permits to dispose of this water to the City?
13. How high off the ground will the vents be?

14. Where will the vents be located? Will the Navy do dispersion modeling to estimate exposures to the community? Will there be a risk assessment? Has the Navy considered a buffer zone?
15. What is the anticipated cost of your methane extraction and treatment system? What is the expected operational cost of running and maintaining this system per year?
16. How long do you expect the system to operate? How did you figure this out?
17. How will you monitor to ensure that the filters are working properly?
18. What happens to the used carbon and plastic resin filters?
19. Will there be an emergency response plan for this system in case of failure, malfunction, natural disaster, etc?
20. Will the Navy update the community notification plan for this action? How can the community help you monitor the system for malfunction, vandalism, or poor work practices?
21. Is there a community relations plan for the shipyard, or this action?
22. How does this action fit with the overall base cleanup strategy? Is the Base Cleanup Plan ready?
23. Will this system be staffed 24 hours a day?
24. How reliable are these systems? What is their mean time between failure? How often might it be shut down for maintenance?
25. How noisy will it be while it is operating? Will it be as loud as the SVE system? Please quantify in decibels. Can the blowers be shut down at night?
26. Which Navy contractor(s) will be responsible for building and operating the system? Will there be jobs for the community?
27. How much truck traffic will be generated during normal operations?
28. How much electric power will be consumed in a 24-hour period?
29. What alternatives did the Navy explore? Why did the Navy select the alternative they did?
30. What do the regulators think about your new approach?
31. Are you still doing this as an emergency removal action?